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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/752,138	01/06/2004	Pei Y. Lee	17745/09022	3893

7590

02/18/2005

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EXAMINER

THOMAS, DAVID B

ART UNIT	PAPER NUMBER
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3723

DATE MAILED: 02/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/752,138	Applicant(s) LEE ET AL.	
	Examiner David B. Thomas	Art Unit 3723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 6-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/6/04, 1/24/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Claims 6-22 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on January 24, 2005.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Hsieh (6,289,771), Kilness (3,269,496), Knoll (3,866,492), or Krivec (5,157,994).

Hsieh, Kilness, Knoll, or Krivec discloses a ratchet wrench having the structure as claimed, including a detent disposed in the body and having a front "wall", a back "wall", and a spring base connecting the front "wall" and the back "wall".

4. Claims 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by Tseng et al. (6,575,060).

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Tseng et al. disclose a ratchet wrench having the structure as claimed, including a detent disposed in the body and having a front wall, a back wall, and a spring base connecting the front wall and the back wall. The tool further comprises a lever disposed in the body, wherein the lever receives the detent; the lever further comprising a handle, and a bottom portion, wherein the detent is disposed in the bottom portion; and the bottom portion further defines a chamber proximate to the pawl that receives the detent back wall.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being obvious over Kilness, Knoll, Krivec, or Tseng et al., as applied to claim 1, respectively, in view of Arnold et al. (US 2004/0083860 A1).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed

in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(I)(1) and § 706.02(I)(2).

Hsieh, Kilness, Knoll, Krivec, or Tseng et al., as applied to claim 1, respectively, disclose the ratchet wrench, as claimed, except for the provision of the pawl and the gear having a different radius, where the radius of the pawl is larger than the radius of the gear. Arnold et al. disclose a reversible ratcheting tool with an improved pawl. Arnold et al. teach because the pawl radius R1 (FIG. 18) is larger than the gear radius R2 (FIG. 5A), the included angles α and adjacent angles ϕ of the pawl teeth are not uniform, as can be seen in FIG. 18. The variation results from pivoting the pawl teeth's non-load-bearing sides 105 so that the included angle α of each tooth is reduced by a desired amount (preferably one to two degrees) less than the included angle of the gear teeth. This adjustment results in a slight gap between the non-load-bearing gear teeth sides and the non-load-bearing pawl teeth sides 105. The gap reduces or eliminates fluid adhesion (caused by grease or oil in the mechanism) and taper fit between the gear and pawl teeth, thereby facilitating smooth removal of the pawl teeth from the gear teeth during ratcheting and pawl reversal [0065]. Therefore, it

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would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified any one of the wrenches of Hsieh, Kilness, Knoll, Krivec, or Tseng et al., by providing the pawl with a radius larger than that of the gear, as taught by Arnold et al., wherein such a pawl and gear relationship results in a slight gap between the non-load-bearing gear teeth sides and the non-load-bearing pawl teeth sides, the gap serving to reduce or eliminate fluid adhesion and taper fit between the gear and pawl teeth, thereby facilitating smooth removal of the pawl teeth from the gear teeth during ratcheting and pawl reversal.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Wu discloses a ratchet wrench.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David B. Thomas whose telephone number is (571) 272-4497. The examiner can normally be reached on 7-4 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph J. Hail can be reached on (571) 272-4485. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'D. B. Thomas', with a long horizontal flourish extending to the right.

David B. Thomas
Primary Examiner
Art Unit 3723

dbt